Climate Change Policy Task Force Revised December 15, 2008 Draft Straw Proposal

Climate Change Policy Task Force

Draft Straw Proposal Revision 6.0 December 15, 2008

Development of Straw Proposal:

The following document is a revised version of a Draft Straw Proposal that the New Hampshire Climate Change Policy Task Force has developed over the past 2 meetings to assist in their identification of the final recommendations and corresponding actions that will be included in the Climate Change Action Plan, which is set to be released in December 2008. The Draft Straw Proposal contains 10 major recommendations with specific actions to take in support of those recommendations. The final list of recommendations and corresponding actions will be determined at the Task Force's final meeting. As described, below, the existing list has been developed and refined over the course of several meetings and does not represent any final determination by the Task Force but rather identifies those items of very high interest.

Each reduction strategy, termed an Action Report, was submitted to the Task Force's technical consultants, UNH-based Carbon Solutions New England (CSNE) for analysis. CSNE provided an analysis of the carbon dioxide reductions, cost of implementation and cost savings associated with each of the 100+ actions that were developed by four of the six technical and policy working groups involved in the project. The assumptions behind their analysis have undergone extensive review by NH Department of Environmental Services staff, by members of the technical and policy working group supporting the process, by the entire Task Force, and by additional individuals noted for their expertise. For the most part, the actions that were identified for inclusion in the original Straw Proposal were those measures that possessed a high CO₂ reduction potential as well as a large and positive net cost benefit.

The Task Force reviewed this initial list and identified additional actions to be included in the Straw Proposal as well as actions already in the Straw that required further discussion at later meetings. These determinations were based on their own expertise as well as the extensive public comment received on the proposed 100+ actions over summer and early fall 2008. Recently, four new actions have been submitted to the Task Force for consideration. These are currently under review in a parallel process and may be included in the final action plan following a round of public comment and discussion by the Task Force at their final meeting.

When the action plan is finally submitted to the Governor in December of 2008, each of the actions that have been developed throughout the entire process will be retained in some fashion. There will be a specific suite of actions, numbering around 60, that will be highlighted as directly link to the Task Force's ten recommendations. The remaining actions will be retained in complete form in a separate appendix. This latter set will be specifically set aside as a resource to be revisited.

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Reduction Goals

New Hampshire has participated in a cooperative effort to develop a regional climate change action plan under the auspices of the Conference of New England Governors and Eastern Canadian Premiers (NEG/ECP). The 2001 NEG/ECP Climate Change Action Plan calls for a long term goal that reduces regional greenhouse gas emissions "sufficiently to eliminate any dangerous threat to the climate: current science suggests this will require reductions of 75-85% below current levels". In a 2007 resolution, the NEG/ECP established a target date of 2050 to achieve "a 75-85% worldwide target reduction in emissions, subject to further scientific analysis of this target".

Increasingly, the goal of reducing greenhouse gases an average of 80% by 2050 has been adopted by more and more states, cities and organizations. This goal is based on the reductions believed by climate scientists to be necessary to stabilize greenhouse gases in the atmosphere at or below 450 parts per million CO₂-equivalentⁱ. Scientists believe that this level will avoid the most severe and dangerous potential impacts of climate change. However, recent research questions whether even this goal will be adequate and argues for reducing emissions even more aggressively.

Clearly, stabilizing the concentrations of greenhouse gases in the atmosphere will only occur through global action. Even regionally, the NEG/ECP Climate Change Action Plan recognized that different jurisdictions would have varying success at meeting even the more achievable short term goals of that plan. However, the long-term goal of reducing greenhouse gas emissions 80% by 2050 is the being used by states and environmental organizations as the bench-mark for assessing whether a climate change action plan is putting in place the policies, market changes, technologies, and regulations necessary to adequately address climate change. Accordingly, the Task Force recommends that New Hampshire strive to achieve a long-term reduction of 80% below 1990 levels, consistent with the NEG-ECP resolutions and the consensus recommendations of the scientific community.

In contrast, mid-term goals should be consistent with specific actions that New Hampshire can take in the context of its energy profile, environmental priorities and resources, and its economic circumstances. The Climate Change Policy Task Force conducted a comprehensive evaluation of all the potential actions New Hampshire could take to reduce its greenhouses and move towards the long term goal of reducing its emissions an average of 80% by 2050. Based on the carbon reductions from the recommended actions described in Chapter 5, New Hampshire' mid-term goal is to reduce emissions nearly 20% below 1990 levels and 60% below business as usual by 2025

The Task Force used the following principles in deciding on its recommendations:

- 1. Maximize greenhouse gas emission reductions to move the state, steadily and as quickly as possible, toward the goal of reducing greenhouse gas emissions 80% below 1990 levels by 2050.
- 2. Select actions that provide the greatest net economic benefit and economic opportunity to New Hampshire while also considering energy security, public health, and environmental benefits.
- 3. Make investments using a phased approach that first exploits the most cost-effective, currently available technologies; incorporate more advanced technologies as they become available and are shown to be cost-effective.
- 4. Ensure that policies (a) do not further disadvantage already disadvantaged populations and (b) include mechanisms to mitigate adverse impacts to disadvantaged populations.
- 5. Reduce vulnerability from a changing climate by planning and taking adaptive measures to address existing and future impacts to natural resources, the built environment, and New Hampshire's way of life.
- 6. Engage the public to take action at the individual community, state, and national levels.
- 7. Create a plan that views climate change in a regional, national, and global context, is reviewed on a regular basis to determine progress, and whose actions can evolve and develop over time in response to changing technology, economics, and sociological circumstances.
- 8. Sustain the state's resources, both cultural and natural, that provide opportunities for both mitigation and adaptation.

Items for Discussion at the December 15th Task Force Meeting:

Unresolved Potential Recommendations

- Enable Importation of Canadian Hydro and Wind Generation (EGU 2.6)
- Allow Regulated Utilities to Build Renewable Generation (EGU 2.7)
- Address Highway Travel Speeds (TLU 1.D.1)
- Address Barriers to Low- and Non-CO2-Emitting Supply-Side Resource (Original EGU 2.4)

Newly Submitted Potential Recommendations

- Support Strong Action at the Federal Level (GLA 1.6)
- Evaluate the Potential to Replace Existing Coal-Fired Generation (EGU Action 2.10)

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| 1. Maximize energy efficiency in buildings. | |
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| Maximize Efficiency in New Construction | RCI 1.1 |
| Maximize Energy Efficiency in Existing Residential Buildings | RCI 1.2 |
| Maximize Energy Efficiency in Existing Commercial, Industrial, and Municipal Buildings | RCI 1.3 |
| Install Higher-Efficiency Equipment, Processes, and Systems | RCI 2.1 |
| Increase the Use of Combined Heat & Power | EGU 1.3 |
| Consider Alternative Rate Structuring | EGU 1.1 |
| Upgrade Building Energy Codes | RCI 1.4.a |
| Increase Building Energy Code Compliance | RCI 1.4.b |
| Establish an Energy Properties Section in Real Estate Property Listings | RCI 1.5 |
| Conserve Embodied Energy in Existing Building Stock | RCI 1.8 |

| 2. Increase renewable and low-emitting energy resources in a long-term sustainable manner. | |
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| Promote Renewable Energy through the Electric Portfolio Standard (RPS) | EGU 2.1 |
| Implement Regional Greenhouse Gas Initiative (RGGI) | EGU 2.2 |
| Increase Renewable and Low-CO ₂ e Thermal Energy Systems | RCI 3.1 |
| Address Barriers to Low- and Non-CO2-Emitting Supply-Side Resources | EGU 2.4 |
| Enable Importation of Canadian Hydro and Wind Generation | EGU 2.6 |
| Allow Regulated Utilities to Build Renewable Generation | EGU 2.7 |
| Identify and Deploy the Next Generation of Electric Grid Technologies | EGU 2.8 |
| Promote Low- and Non-CO ₂ -Emitting Distributed Generation | EGU 2.9 |
| Encourage the Use of Biogenic Waste Sources for Energy Generation | AFW 2.4 |

| 3. Support regional and national actions to reduce greenhouse gas emissions. | |
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| Support Stricter Corporate Average Fuel Economy Standards | TLU 1.A.1 |
| Support Fuel Economy Standards for Heavy-Duty Vehicles | TLU 1.A.2 |
| Adopt a Low-Carbon Fuel Standard | TLU 1.C.1 |
| Promote Advanced Technology Vehicles and Supporting Infrastructure | TLU 1.C.2 |

| 4. Reduce vehicle emissions through state actions. | |
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| Adopt California Low Emission Vehicle (CALEV) Standards | TLU 1.A.3 |

| Create a Point-of-Sale Financial Incentive for Efficiency Vehicles | TLU 1.B.1 |
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| Install Retrofits to Address Black Carbon Emissions | TLU 1.C.3 |
| Implement Commuter Trip Reduction Initiative | TLU 2.A.1 |
| Address Highway Travel Speeds | TLU 1.D.1 |
| Address Vehicle Idling | TLU 1.D.2 |
| Improve Traffic Flow | TLU 1.D.3 |

| 5. Encourage land use patterns that enable fewer vehicle-miles traveled (VMT). | |
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| Assess Greenhouse Gas Development Impact Fees (Conduct Feasibility Study) | TLU 2.C.1.a |
| Streamline Approvals for Low- Greenhouse Gas Development Projects | TLU 2.C.1.b |
| Develop Model Zoning to Support Bus/Rail Transit | TLU 2.C.2 |
| Develop Model Zoning for Higher-Density, Mixed-Use Development | TLU 2.C.3 |
| Continue/Expand Funding, Education, and Technical Assistance to Municipalities | TLU 2.C.8 |

| 6. Reduce VMTs through an integrated multi-modal transportation system. | |
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| Expand Local/Intra-Regional Transit (Bus) Service | TLU 2.B.1.a |
| Improve Existing Local/Intra-Regional Transit (Bus) Service | TLU 2.B.1.b |
| Expand and Improve Bicycle and Pedestrian Infrastructure | TLU 2.B.1.c |
| Maintain and Expand Passenger Rail Service | TLU 2.B.2.a |
| Maintain and Expand Freight Rail Service (Conduct Initial Study) | TLU 2.B.2.b |
| Implement a Stable Funding Stream to Support Public Transportation | TLU 2.B.2.c |
| Improve Existing Inter-City Bus Service | TLU 2.B.2.h |
| Expand Park-and-Ride Infrastructure | TLU 2.B.2.e |

| 7. Protect and manage natural resources (e.g., land, water, wildlife) to maintain and expand carbon sequestration in forest and agricultural lands. | |
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| Avoid Net Forest Land Conversion | AFW 1.2 |
| Promote Durable Wood Products | AFW 1.3 |
| Optimize Availability of Biomass for Electricity and Heating within Sustainable Limits | AFW 2.2 |
| Protect Agricultural Land | AFW 1.1.3 |
| Maximize Source Reduction, Reuse and Recycling | AFW 3.1 |

8. Lead by example in government operations.

| Establish an Energy Management Unit to Address State Energy Use and Greenhouse Gas Emissions | GLA 1.1 |
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| Establish an Energy Consumption and Greenhouse Gas Emissions Baseline Inventory for State Government | GLA 1.2 |
| Establish a Self-Sustaining Fund for Energy Efficiency Projects in State Government | GLA 1.3 |
| Support the Establishment of Local Energy Commissions | GLA 1.4 |
| Include Climate Change Adaptation and Mitigation in Programs and Planning | GLA 1.5 |
| Increase Funding for High Performance Public Schools | GLA 2.6 |

| 9. Develop plans to enable society to adapt to existing and potential climate change impacts. | |
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| Develop a Climate Change Adaptation Plan for the State of New Hampshire | ADP 8 |
| Develop and Distribute Critical Information on Climate Change | ADP 1 |
| Promote Policies and Actions to Help Populations Most at Risk | ADP 2 |
| Charge and Empower Public Health Officials to Prepare for Climate Change | ADP 3 |
| Strengthen Protection of New Hampshire's Natural Systems | ADP 4 |
| Increase Resilience to Extreme Weather Events | ADP 5 |
| Strengthen the Adaptability of New Hampshire's Economy to Climate | ADP 6 |

| 10. Develop an integrated education, outreach and workforce training program. | |
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| Develop an Overarching Outreach and Education Plan | RCI 4.6 |
| Include Energy Efficiency and Conservation in School Curriculum | RCI 4.1 |
| Increase Energy Efficiency through Building Management Education Programs | RCI 4.2 |
| Reduce Residential Energy Demand through Education and Outreach | RCI 4.3 |
| Establish a Comprehensive Energy Efficiency and Renewable Energy Education Program | RCI 4.4 |
| Create an Energy Efficiency and Sustainable Energy Systems Web Portal | RCI 4.5 |

 $^{^{}i}$ Equivalent is a measurement that expresses the concentration of all heat-trapping gases in terms of CO_2 and is frequently noted as CO_2e .